

### **REMARKS**

Applicant has amended the above-identified application in response to the Office Action dated July 20, 2004. The Office Action followed the Appeal Board's decision and opinion of March 18, 2004 and Applicant's preceding amending response of May 17, 2004.

In brief, claims 1-3 and 5-10 remain pending in the application, with each of independent claims 1, 9 and 10 having been further amended to both overcome the indefiniteness rejections raised, as well as the reciting of the Hand and Glovak references in a new rejection of the claims.

Addressing first the indefiniteness rejection of page 2, paragraph 2, Applicant respectfully submits that the Examiner is simply incorrect in his position regarding elliptically extending surfaces, as it applies to both the Hand reference and the present application. Specifically, the Examiner asserts the position that Fig. 3 of the drawings in the present application illustrates surfaces which are convex arcs, however it is unclear how they may be defined and claimed as being part of an ellipse and not part of a circle.

Applicant encloses, with this response, pages copied from the American Heritage Dictionary, as pertaining to definitions for both the terms "convex" and "ellipse". Specifically, the term "convex", as specifically defined in the Hand disclosure, is defined as having a surface or boundary that curves or bulges outward, as the exterior of a sphere. While the illustration accompanying this definition identifies a generally hemispherical shape, it is understood that more flattened (yet consistent) curvatures, such as which are identified in the Hand disclosure, fall within the scope of "convex" as defined.

In contrast, and referencing further the term "ellipse", the dictionary both recites and illustrates the definition of this term as being a plane curve formed by: a. A conic section taken

neither parallel to an element nor parallel to the axis of the intersected cone. b. The locus of points the sum of the distances of each of which from two fixed points is the same constant.

When comparing the illustrations taken from the dictionary definition for “ellipse”, in particular to the illustration of Fig. 3 in the present application, it is clear that the configuration of the present article is elliptical and NOT convex as alleged.

Addressing further the Examiner’s application of the Board’s comments in the written opinion, the Board stated that, though, the term “convex” encompasses elliptically extending surfaces, it also embraces a number of other regular (e.g. circular) and irregular surfaces which are not elliptically extending. Under these circumstances, it was submitted that the broad disclosure by Hand that the surfaces 48 and 54 are convex is not sufficient to meet the limitation of claim 1 (or claims 9 and 10) calling for the faces to be elliptically extending.

In the present case, and having established that the elliptical surfaces of the present design (as recited in each of independent claims 1, 9 and 10) are limited to being solely elliptical and not convex in shape (as again further supported by the attached definition of an ellipse). It is therefore submitted that application of the Board’s comments against the assertion of convex shaped surfaces, in the present claims, is inappropriate.

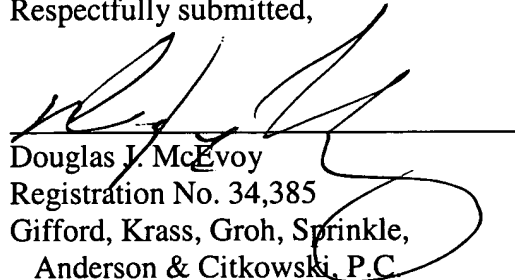
Having conclusively established that a specifically elliptical surface precludes a finding of obviousness by a convex surface (and consistent with Board’s opinion), it is further submitted that the application, by virtue of amended independent claims 1, 9 and 10, overcomes the Hand and Glovak references. Applicant has further amended each of the independent claims to further clarify the feature of the substantially solid body interior, bounded by the interior elliptical cavity and the outer elliptical perimeter.

Neither Hand nor Glovak, in particular Hand, teach or suggest a solid interior boundary (see at 17 in the present illustrations and the detailed description) and which in particular surround the perimeter extending edge associated with the interior cavity. The variant of Fig. 5 in Hand, as supported by the disclosure of column 2, line 74 through column 3, line 20, illustrates and describes upper and lower body members adhered together about a perimeter edge and such that they create in combination a convex shaped article exhibiting an interior and concave shaped air pocket 57.

Reviewing again Fig. 5 of Hand closely, no solid interior exists for this article, as the thickness of the outer boundary, from center to perimeter edge, retains a uniform thickness. Glovak neither teaches nor suggests the features recited and argued above as to claims 1, 9 and 10 and, accordingly, is submitted to likewise be overcome by the distinguishing features associated with the amended claims.

In view of the above, it is submitted that the application is (finally) in appropriate condition for allowance and such action is favorably requested. Attorney for Applicant would encourage a call from the Examiner at (248) 647-6000 with any questions the Examiner may have.

Respectfully submitted,



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Serial No. 09/837,824

Response to Office Action of July 20, 2004



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Judith T. Lange  
Judith T. Lange



## **EXHIBIT "A"**

**Related pages from American Heritage Dictionary for the terms "convex" and "ellipse"**



# THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE

direct; regulate. 2. To regulate (a scientific experiment or by computer) for comparison. See *con-1*. Authority or restraining act or iparison for checking or 4. Usually plural. An to operate, regulate, or *lism*. A spirit presumed nglish *controllen*, from al Latin *contratouläre*, register, from *conträro*-Latin *conträ*, against, 'om *rola*, wheel (see *ret* -*con-trol*'la-ble *adj.* antitative characteristic etermined from small, luated with respect to zontal lines above and r average-value of the

which the variable fac-changing one at a time

ise to a military attack to avoid nuclear war. -*roler* (for sense 2). o audits accounts and ration or of a govern- im, as in a vehicle or

cket or similar missile of a rocket or space-

raft to control the angle

ially a rudder, aileron, ircraft, guided missile,

1 tower at an airport adio.

1. Of, subject to, or troversy; disputatious. -ly *adv.*

s. 1. A dispute, espides holding opposing ing in such disputes.

English *controveris*, s, turned against, dist - *versus*, past parti- pendix\*.)

-*verting*, -*verts*. 1. To to deny. 2. To argue roversy (by analogy -*ble adj.*

-*able adj.* Obstinately -*con-tu-mä*'cious-ly

l. pl. -*cies*. Obstinate stubborn rebellious- liddle English *contu-mäx*, stubborn, dis-

-*tem-lä* n. pl. -*lies*. r speech; insolence. : English *contumelie*, insult, reproach. See us (-*mä*'lä-s) *adj.*

-*tusing*, -*tuses*. To se. [Middle English m Latin *contundere* : *com-* (intensive) + -*tu-sion* n. : in which a fanciful lem admitting of no - a mock-Latin uni-

redominantly urban : arcas; metropolitan ) + -*ATION*.]

-*tescing*, -*tesces*. To [Latin *convalescere* : g, from *valere*, to be

Gradual return to rood needed for this.

or process of trans- it transfer by fluid ity that result from sed by an external : transfer of heat or otion within the at- ed upward. [Late gether, bring along :

Judge/k kick/l lid, sauce/sh ship, dish/

*com-*, together + *vehere*, to carry (see *wegh-* in Appendix\*.)  
-*con-vec-tion-al adj.* -*con-vec-tive adj.* -*con-vec-tive-ly adv.*  
*con-vec-tor* (kän-vek'tör) n. A partly enclosed, directly heated surface from which warm air circulates by convection.  
*con-vene* (kän-ven') v. -*vened*, -*vening*, -*venes*. -*intr.* To assemble, usually for an official or public purpose; meet formally. -*tr.* 1. To cause to come together or assemble; convoke. 2. To summon to appear, as before a court of law. [Middle English *convenen*, from Old French *convenir*, to come together, meet, hence agree, be suitable, from Latin *convenire* : *com-*, together + *venire*, to come (see *gwa-* in Appendix\*.)] -*con-ven'a-ble adj.* -*con-ven'er n.*  
*con-venience* (kän-ven'yans) n. Also rare *con-ven-iency* (-yän-sē) pl. -*cies*. 1. The quality of being convenient; suitability or handiness. 2. Personal comfort; material advantage. 3. Anything that increases comfort or makes work less difficult; a convenient appliance, service, condition, or circumstance. "If one's own car is a convenience, everybody else's is a nuisance." (Joseph Wood Krutch). 4. British. A lavatory. -*at one's convenience*. When it is convenient.  
*con-venient* (kän-ven'yant) *adj.* 1. Suited or favorable to one's comfort, purpose, or needs. 2. Easy to reach; accessible. 3. *Obsolete*. Fitting and proper; appropriate. [Middle English, from Latin *conveniēns*, present participle of *convenire*, to be suitable. See *convene*.] -*con-ven'ient-ly adv.*  
*con-vent* (kän-vönt, -vönt') n. 1. A community, especially of nuns, bound by vows to a religious life under a superior. 2. The building or buildings occupied by such a community; especially, a nunnery. [Middle English *covent*, from Old French, from Medieval Latin *conventus*, from Latin, a coming together, assembly, from *convenire*, to come together, *CONVENIRE*.]  
*con-venti-cle* (kän-ven'ti-kel) n. A religious meeting, especially a secret or illegal one, such as those held by dissenters in England and Scotland in the 16th and 17th centuries. [Middle English, from Latin *conventiculum*, a place of meeting, diminutive of *conventus*, assembly, *CONVENT*.] -*con-ven'ti-cler n.*  
*con-vention* (kän-ven'shan) n. *Abbr.* *conv.* 1. A formal assembly or meeting of members, representatives, or delegates of a group, such as a political party or fraternal society. 2. The body of persons attending such an assembly. 3. An agreement or compact; especially, an international agreement dealing with a specific subject, as the treatment of war prisoners. 4. General agreement on or acceptance of certain practices or attitudes. 5. A practice or procedure widely observed in a group, especially to facilitate social intercourse; custom. 6. A widely used and accepted device or technique, as in drama, literature, or painting; *the theatrical convention of the aside*. [Middle English *convenioun*, from Old French *convention*, from Latin *conventio*, assembly, agreement, from *convenire*, to come together, *CONVENIRE*.]  
*con-vention-al* (kän-ven'shan-al) *adj.* 1. Developed, established, or approved by general usage; customary. 2. Conforming to established practice or accepted standards. 3. Marked by or dependent upon conventions, to the point of artificiality. 4. *Art.* Represented in simplified or abstract form. 5. *Law*. Based upon consent or agreement; contractual. 6. Of or having to do with an assembly. 7. Using means other than nuclear weapons or energy. -*con-ven'tion-al-ism' n.* -*con-ven'tion-al-ist n.* -*con-ven'tion-al-i-za'tion n.* -*con-ven'tion-al-ly adv.*  
*con-ven-tion-al-ity* (kän-ven'shän-äl'tē) n. pl. -*ties*. 1. The state, quality, or character of being conventional. 2. A conventional act, principle, or practice. -*the conventionalities*. The rules of conventional social behavior.  
*con-vention-er* (kän-ven'shän-ir') n. One who attends a convention.  
*con-ven-tu-al* (kän-ven'chö-äl) *adj.* Of or pertaining to a convent. -*n.* A member of a convent.  
*Con-ven-tu-al* (kän-ven'chö-äl) n. A member of a branch of the Franciscan order that permits the accumulation and possession of common property.  
*con-verge* (kän-vürj') v. -*verged*, -*verging*, -*verges*. -*intr.* 1. To approach the same point from different directions; tend toward a meeting or intersection. 2. To tend or move toward union or toward a common conclusion or result. 3. *Mathematics*. To approach a limit. Compare *diverge*. -*tr.* To cause to converge. [Late Latin *convergere*, to incline together : Latin *com-*, together + *vergere*, to bend, turn, incline (see *wer-* in Appendix\*.)]  
*con-ver-gence* (kän-vürj'ens) n. Also *con-ver-gen-cy* (-jän-sē) pl. -*cies*. 1. The act, condition, quality, or fact of converging. 2. *Mathematics*. The property or manner of approaching a limit such as a point, line, surface, or value. 3. The point or degree of converging. 4. *Physiology*. The coordinated turning of the eyes inward to focus on a nearby point. 5. *Biology*. The adaptive evolution of superficially similar structures, such as the wings of birds and insects, in unrelated species subjected to similar environments. -*con-ver-gent adj.*  
*con-ver-sance* (kän-vör-säns) n. Also *con-ver-san-cy* (-sän-sē). The state of being conversant; familiarity. Used with *with*.  
*con-ver-sant* (kän-vör-sant, kä-vür'-) *adj.* Familiar, as by study or experience. Used with *with*. [Middle English *conversaunt*, from Old French *conversant*, from Latin *conversans*, present participle of *conversari*, to associate with, *CONVERSE*.] -*con-ver-sant-ly adv.*  
*con-ver-sa-tion* (kän-vör-sä'shon) n. 1. An informal spoken exchange of thoughts and feelings; a familiar talk. 2. Social intercourse; close association. 3. *Rare*. Close acquaintance, as with an object of study. 4. *Obsolete*. A circle of acquaintances; one's associates. 5. *Obsolete*. Manner of life; behavior.  
*con-ver-sa-tion-al* (kän-vör-sä'shon-al) *adj.* 1. Of, pertaining to,

or in the style of conversation. 2. Adept at or given to conversation. -*con-ver-sa-tion-al-ly adv.*

*con-ver-sa-tion-al-ist* (kän-vör-sä'shon-al-ist) n. Also *con-ver-sa-tion-ist* (-shon-ist). One given to or skilled at conversation. *conversation piece*. 1. A kind of genre painting, especially popular in the 18th century, depicting a group of fashionable people. 2. An unusual object that arouses comment or interest.

*con-ver-sa-zi-o-ne* (kän-vör-sä'sē-ō-nē; Italian *kän-vör-sä'tsyō'nä*) n. pl. -*nes* or -*ni* (-nē). A meeting for conversation or for discussion, especially of art. [Italian, "conversation," from Latin *conversatio*, from *conversari*, to converse.]

*con-ver-se* (kän-vürs') *intr.v.* -*versed*, -*versing*, -*verses*. 1. To engage in spoken exchange of thoughts and feelings; talk. 2. *Rare*. To consort; associate. -*See* Synonyms at *speak*. -*n.* (kän-vürs'). 1. Spoken interchange of thoughts and feelings; conversation. 2. *Rare*. Social intercourse. [Middle English *conversen*, to dwell, associate with, from Old French *converser*, from Latin *conversari*, to associate with : *com-*, with + *versari*, to live, occupy oneself, from *versare*, frequentative of *vertere*, to turn (see *wer-* in Appendix\*.)]

*con-ver-se* (kän-vürs', kä-vürs') *adj.* Reversed, as in position, order, or action; contrary. -*n.* (kän-vürs'). 1. Something that has been reversed; the opposite. 2. *Logic*. A proposition obtained by conversion. [Latin *conversus*, past participle of *convertere*, to turn around. See *convert*.] -*con-ver-se-ly* (kän-vürs'lē) *adv.*

*con-ver-sion* (kän-vür'zhän, -shän) n. 1. The act of converting. 2. The state of being converted. 3. A change in which one adopts a new religion. 4. A change from one belief, opinion, or practice to another. 5. *Law*. a. The unlawful appropriation of another's property. b. The changing of real property to personal property or vice versa. 6. *Finance*. The exchange of one type of security or currency for another. 7. *Logic*. The interchange of the subject and predicate of a proposition. 8. *Football*. A score made on a try for a point or points after a touch-down. 9. *Psychiatry*. The symbolic manifestation of repressed ideas or impulses in motor or sensory abnormalities such as paralysis. In this sense, also called "conversion hysteria." [Middle English *conversoun*, from Old French *conversion*, from Latin *conversio*, from *convertere*, to turn about, *CONVERT*.] -*con-ver-sion-al*, *con-ver-sion-ar'y* (-är') *adj.*

*con-vert* (kän-vürt') v. -*verted*, -*verting*, -*verts*. -*tr.* 1. To change into another form, substance, state, or product; transmute: *convert water into ice*. 2. To persuade or form; transmute: *convert a religion, faith, or belief*. 3. To induce to adopt a particular religion, faith, or belief. 4. To change from one use, function, or purpose to another; adapt to a new or different purpose. 5. *Finance*. To exchange (a security or bond, for example) by substituting an equivalent of another form. 6. To express (a quantity) in alternative units. 7. *Logic*. To transform (a proposition) by conversion. 8. *Law*. a. To appropriate without right (another's property) to one's own use. b. To change (property) from real to personal, from joint to separate, or vice versa. -*intr.* 1. To be converted; undergo a change. 2. *Football*. To make a conversion. -*See* Synonyms at *change*. -*n.* (kän-vürt'). One who has been converted, especially from one religion or belief to another. [Middle English *convertien*, from Old French *convertir*, from Medieval Latin *convertere*, to convert religiously, from Latin, to turn around, transform : *com-* (intensive) + *vertere*, to turn (see *wer-* in Appendix\*.)]

*con-vert-er* (kän-vürt'er) n. Also *con-ver-tor*. 1. One that converts. 2. A workman or machine employed in converting raw products into finished products. 3. A furnace in which pig iron is converted into steel by the Bessemer process. 4. a. A machine that changes electric current from one kind to another. b. A device that changes one frequency to another. c. A device that transforms information from one code to another.  
*con-vert-i-ble* (kän-vürt'-ä-ä) *adj.* 1. Capable of being converted. 2. Having a top that may be folded back or removed, as an automobile. 3. *Finance*. *Abbr.* *conv.* *cvt.* Capable of being lawfully exchanged for gold or another currency: *dollars convertible into pounds*. -*n.* 1. A convertible automobile. 2. That which can be converted. -*con-vert-i-bil'i-ty*. *con-vert-i-ble-ness* n. -*con-vert-i-bly adv.*

*con-vert-i-plane* (kän-vürt'-ä-plän') n. Also *con-ver-t-a-plane*. An airplane built to fly vertically as well as forward. [*CONVERT*-(BLE) + (*AIR*)*PLANE*.]

*con-vex* (kän-veks, kä-veks') *adj.* Having a surface or boundary that curves or bulges outward, as the exterior of a sphere. Compare *concave*. [Latin *convexus*, arched; *convex*. See *wegh-* in Appendix\*.] -*con-ve-x-ly adv.*

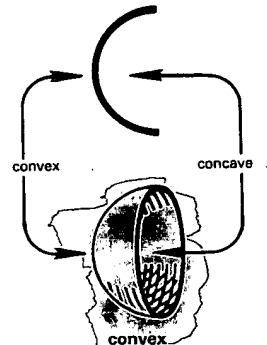
*con-ve-x-i-ty* (kän-veks'-i-tē) n. pl. -*ties*. 1. The state of being convex. 2. A convex surface, body, part, or line.

*con-ve-x-o-con-cave* (kän-veks'-ö-kän-käv') *adj.* 1. *Concavo-convex* (see). 2. *Optics*. Having greater convex than concave curvature. Said of lenses.

*con-ve-x-o-con-ve-x* (kän-veks'-ö-kän-veks') *adj.* Convex on both sides; doubly convex; biconvex.

*con-vey* (kän-vä') *tr.v.* -*veyed*, -*veying*, -*veys*. 1. To take or carry from one place to another; to transport. 2. To serve as a medium of transmission for; to conduct; transmit. 3. To communicate or make known; impart: "a look intended to convey sympathetic comprehension" (Saki). 4. *Law*. To transfer ownership of or title to. 5. *Obsolete*. To steal. [Middle English *conveien*, from Old French *conveier*, from Medieval Latin *convēire*, to go with, escort : Latin *com-*, with + *via*, way (see *wei-* in Appendix\*.)] -*con-vey'a-ble adj.*

*Synonyms*: convey, carry, bear, transport, transmit, transfer. These verbs refer to the movement of something from one place

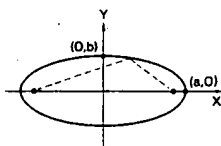


conversation piece  
Detail from  
"The Cholmondeley Family,"  
a conversation piece by  
William Hogarth, 1732

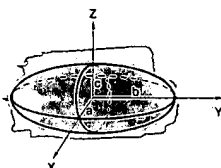
t tight/th thin, path/th this, bathe/ü cut/ür urge/v valve/w with/y yes/z zebra, size/zh vision/ö about, item, edible, gallop, circus/ä Fr. ami/œ Fr. feu, Ger. schön/ü Fr. tu, Ger. über/KH Ger. ich, Scot. loch/N Fr. bon. \*Follows main vocabulary. †Of obscure origin.



Elizabeth I  
Detail from a  
portrait by an  
unknown artist,  
painted about 1575



ellipse  
The equation of the  
ellipse shown is  $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$



ellipsoid  
The equation of the ellipsoid  
shown is  $\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$



El Salvador

to spurn the masses" (Christopher Morris). b. A narrow and powerful clique: "Twentieth-century show business has a small and incomparable elite" (Kenneth Tynan). 2. A size of type on a typewriter, equal to ten points. [French *élite*, from Old French *eslite*, feminine past participle of *eslire*, to choose, from Vulgar Latin *exlegere* (unattested), variant of Latin *ēligere*. ELECT.] —*o-lit-ē* adj.

**e-lit-ism** (i-lit'iz-əm) n. Also *ē-lit-ism* (ā-lit'iz-əm). 1. a. Belief in rule by an elite. b. Rule or domination by an elite. 2. A sense of being part of a superior or privileged group: *intellectual elitism*. —*e-lit-ist* adj. & n.

**e-lit-ir** (i-lit'sar) n. 1. A sweetened aromatic solution of alcohol and water, containing or serving as a vehicle for medicine. 2. Any medicinal potion thought to have generalized curative or restorative powers. 3. *Alchemy*. a. A substance believed to have the power to transmute base metals to gold. Also called "philosopher's stone." b. A substance believed to have the power to cure all human disorders. Also called "panacea." c. A substance believed to maintain life indefinitely. Also called "elixir of life." The three substances were often regarded as one. 4. The quintessence or underlying principle of anything. [Middle English *elixir*, from Medieval Latin, from Arabic *al-iksir*, "the elixir": *al-*, the + *iksir*, perhaps from Greek *xērion*, dry powder medicine, from *xēros*, dry (see *kaero-* in Appendix\*).] —*e-liz-a-beth* (i-liz'ə-bəth) n. Also *E-lis-a-beth*. A feminine given name. [Middle English, from Late Latin, from Greek *Elisabēth*, *Elisabet*, from Hebrew *Elisheba*, probably "one to whom God is an oath": *El*, God + *shebha*, oath, related to *shibhā*, seven, and *nishbā*, he swore (because seven was a sacred number upon which oaths were taken).]

**E-liz-a-beth** (i-liz'ə-bəth). The mother of John the Baptist and wife of Zacharias, and a kinswoman of Mary. Luke 1. **E-liz-a-beth** (i-liz'ə-bəth). A city in northeastern New Jersey, on Newark Bay. It was the first provincial capital of New Jersey (1668-86). Population, 113,000.

**E-liz-a-beth** (i-liz'ə-bəth). 1533-1603. Queen of England and Ireland (1558-1603). **E-liz-a-beth** (i-liz'ə-bəth). Full name, Elizabeth Alexandra Mary. Born 1926. Queen of Great Britain and Northern Ireland (since 1952).

**E-liz-a-beth** (i-liz'ə-bəth). Pertaining to or characteristic of the reign of Elizabeth I: *Elizabethan drama*. —*n*. An Englishman of the second half of the 16th century. **Elizabethan** sonnet. A Shakespearean sonnet (see). **E-liz-a-beth** River (i-liz'ə-bəth). A short river of Virginia, entering Hampton Roads between Norfolk and Portsmouth.

**El Je-zira**. The Arabic name for Gezira. **El Jib**. The modern name for Gibeon. **elk** (ēlk) n. pl. *elks* or *elk*. 1. A North American deer, the *wapiti* (see). 2. A large deer, *Alces alces*, of northern regions, having large, palmated antlers, and called "moose" in North America. 3. A light, pliant leather of horsehide or calfskin, tanned and finished to resemble elk hide. [Middle English *elke*, from Old Norse *elgr*. See *el-* in Appendix\*.]

**El Kha-il**. The Arabic name for Hebron. **elk-hound** (ēlk'hound) n. A hunting dog of a breed developed in Scandinavia, having a grayish-coat and a tail curled up over the back. Also called "Norwegian elkhound." **Elk Mountains**. A range of the Rocky Mountains in west-central Colorado. Highest elevation, 14,259 feet.

**ell** (ēl) n. A wing of a building at right angles to the main structure. **ell** (ēl) n. An English linear measure equal to 45 inches, formerly used in measuring cloth. [Middle English *elle*, *eln*, Old English *eln*, forearm, *el* (originally about the length from the elbow to tip of the middle finger). See *el-* in Appendix\*.] **ell** (ēl) n. Variant of *el* (letter).

**El-las**. The Modern Greek name for Greece. **El-len** (ēl'en). A feminine given name. [Variant of HELEN.] **Ellesmere Island** (ēlz'mir). The largest (82,119 square miles) of the Queen Elizabeth Islands, Northwest Territories, Canada, constituting at its tip the northernmost point in North America. **Ellice Islands** (ēl'is). Formerly Lagoon Islands. A group of atolls in the southwestern Pacific Ocean, part of the British Western Pacific High Commission Protectorate of Gilbert and Ellice Islands.

**Ell-ing-ton** (ēl'ing-ton), Edward Kennedy ("Duke"). 1899-1974. American jazz composer, pianist, and conductor. **el-lipse** (i-lips) n. A plane curve formed by: a. A conic section taken neither parallel to, nor perpendicular to, the axis of the intersected cone. b. The locus of points the sum of the distances of each of which from two fixed points is the same constant. [Back-formation from *ellipse*; when an ellipse is formed from a conic section the angle made by the base of the cone and the intersecting plane is less than 90°; *el-*, to leave, the angle made by the intersecting plane which forms a parabola.]

**el-lip-sis** (i-lip'sis) n. pl. *-ses* (-sēz). 1. Grammar. The omission of a word or words necessary for the complete syntactical construction of a sentence but not necessary for understanding it; for example, *Stop laughing for You stop laughing*. 2. A mark or series of marks (.... or ...) used in writing or printing to indicate an omission of a word or words. [Latin *ellipsis*, from Greek *elleipsis*, a falling short, defect, from *elleipn*, to leave or behind, leave out: *en-*, in + *leipn*, to leave (see *leikw-* in Appendix\*).]

**el-lip-soid** (i-lip'soid) n. A geometric surface whose plane sections are all either ellipses or circles. [ELLIPS(E) + -OID.] —*el-lip-soid* adj.

**el-lip-soid** (i-lip'soid) n. A geometric surface whose plane sections are all either ellipses or circles. [ELLIPS(E) + -OID.] —*el-lip-soid* adj.

ā pat/ā pay/ā care/ā father/b bib/ch church/d deed/ē pet/ē be/f five/g gag/h hat/hw which/i pt/i pie/lr pier/j judge/k kick/l lid, needle/m mum/n no, sudden/thing/p pot/ō toe/ō paw, for/oi noise/ou out/ōō took/ōō boot/p pop/r roar/s sauce/s ship, dish/

**el-lip-tic** (i-lip'tik) adj. Also *el-lip-tic* (i-lip'tik). 1. a. Of, pertaining to, or having the shape of an ellipse. b. Resembling or having the approximate shape of an ellipse. 2. Grammar. Containing or characterized by ellipsis; having a word or words omitted. [Greek *elleiptikos*, defective, from *elleipn*, to fall short. See *ellipsis*.] —*el-lip-tic-ly* adv.

**elliptic geometry**. Riemannian geometry (see). **el-lip-tic-ity** (i-lip'tis'ə-tē) n. 1. Deviation from perfect circular or spherical form toward elliptic or ellipsoidal form. 2. The degree of such deviation.

**El-lis** (ēl'is), (Henry) Havelock. 1859-1939. British psychologist and man of letters. **El-lis Island** (ēl'is). An island, about 27 acres in area, in Upper New York Bay, the former leading U.S. immigration center (1892-1943) and now part of the Statue of Liberty National Monument.

**El-li-son** (ēl'i-sən), Ralph (Waldo). Born 1914. American author. **Ells-worth** (ēlz'wūth'), Lincoln. 1880-1951. American explorer of the Arctic and Antarctic.

**Ells-worth Land** (ēlz'wūth'). A high plateau of Antarctica, between Marie Byrd Land and the west coast of Weddell Sea. **El-lul**. Variant of *Elul*.

**elm** (ēlm) n. 1. Any of various deciduous trees of the genus *Ulmus*, characteristically having arching or curving branches and widely planted as shade trees. 2. The wood of any of these trees. [Middle English *elm*, Old English *elm*. See *el-* in Appendix\*.] —*elm'y* adj.

**El Man-su-ra** (ēl mán-sōr'ə). A city of northern Egypt; site of the defeat of Louis IX of France by the Mamelukes in 1250. Population, 147,000.

**El-mi-ra** (ēl-mī'ra). A city of southwestern New York State; the site of Mark Twain's home and burial place. Population, 40,000. **El Mis-ti** (ēl mēs'tē). A volcano, 19,166 feet high, in southern Peru, northeast of Arequipa.

**El Mor-ro National Monument** (ēl mōr'ō). An area occupying 240 acres in western New Mexico, reserved to protect its cliff-dweller ruins and a sandstone rock bearing inscriptions by early Spanish and other later explorers.

**El O-beid** (ēl ō-bēd'). The capital of Kordofan Province, Republic of Sudan, and an important transportation and trade center. Population, 52,000.

**elo-cu-tion** (ēl'ə-kyōō'shən) n. 1. The art of public speaking, emphasizing gesture and vocal production and delivery. 2. The style or manner of public speaking. 3. An artificial, forced manner of speaking. [Middle English *elocution*, from Latin *elocutiō*, from *eloqui* (past participle *elocutus*), to speak out: *ex-*, out + *loqui*, to speak (see *talkw-* in Appendix\*).] —*elo-cu-tion-ary* adj. —*elo-cu-tion-ist* n.

**E-lo-him** (ē-lō'hīm, ē-lō'hēm'). The Hebrew name for God most frequently encountered in the Old Testament. Compare *Yahweh*. [Hebrew *Elōhim*, plural of *Elōah*, God, possibly enlarged from *El*, God.] —*E-lo'hism* n.

**E-lo-hist** (ē-lō'hist) n. The author of the passages of the Hexateuch in which the name *Elōhim* is used to designate God rather than the name *Yahweh*. —*E-lo-his-tic* adj.

**e-loign** (i-loin') tr.v. *eloigned*, *eloigning*, *eloigns*. Archaic. To remove or carry away (property). [Middle English *eloyne*, from Old French *esloignier*, from Vulgar Latin *exlongare* (unattested), variant of Late Latin *exlongare*: Latin *ex-*, away + *longē*, far away, distant, from *longus*, long (see *del-* in Appendix\*).] —*e-loign-ment* n. —*e-top'er* n.

**El-o-ise** (ēl'ō-wēz', ēl'ō-wēz'). A feminine given name. [French *Héloïse*, from Germanic. See *kailo-* in Appendix\*.] **e-long-gate** (i-lōng'gāt, i-lōng'-) v. *-gated*, *-gating*, *-gates*. —tr. To lengthen or extend. —intr. To grow in length. —adj. 1. Lengthened; extended. 2. Slender. [Latin *elongare*: Latin *ex-*, out + *longus*, long (see *del-* in Appendix\*).] **e-long-ga-tion** (i-lōng'gā'shən, i-lōng'-, ē'lōng-, ē'lōng-) n. 1. The act of elongating or the condition of being elongated. 2. Something that elongates: an extension.

**e-lope** (i-lōp') intr.v. *eloped*, *eloping*, *elopes*. 1. To run away with a lover, especially with the intention of getting married, usually without parental consent. 2. To run away; abscond. [Norman French *aloper*, legal term applied to a wife who ran away with her lover, from Middle English *alopen* (unattested), past participle of *alepen* (unattested), to run away: *a-*, away + *lepen*, to run, leap, Old English *hlēpan* (see *klou-* in Appendix\*).] —*e-lope-ment* n. —*e-top'er* n.

**elo-quence** (ēl'ə-kwəns) n. 1. Persuasive and fluent discourse. 2. The ability or power to persuade with such discourse.

**elo-quent** (ēl'ə-kwənt) adj. 1. Persuasive, fluent, and graceful in discourse. 2. Vividly or movingly expressive of an emotion: "Each face eloquent of polite misgiving" (Evelyn Waugh). [Middle English, from Old French, from Latin *eloquens*, present participle of *eloqui*, to speak out. See *elocution*.] —*elo-quent-ly* adv. —*elo-quent-ness* n.

**El Pas-o** (ēl pās'ō). A city of Texas, in the west on the Rio Grande directly opposite Ciudad Juárez, Mexico. Population, 322,000.

**El Sal-vador** (ēl sāl'vā-dōr', Spanish ēl sāl'vā-thōr'). Officially, Republic of El Salvador. A country of Central America, in the west on the Pacific Coast. Population, 3,400,000. Capital, San Salvador.

**El-sass-Lo-thring-en**. The German name for Alsace-Lorraine. **else** (ēls) adj. 1. Other; different: *somebody else*. 2. In addition; additional; more: *Would you like anything else?* —adv. 1. In a different time, place, or manner; differently: *How else could it be done?* 2. If not; otherwise: *Be careful, or else you will make a*



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